



# Each of us make a *difference*

Would it surprise you to learn that the biggest source of water pollution today is not big industry? It's us. It is waste from our everyday activities, washed into ditches and streams by rainstorms and runoff from sprinkler systems. It's oil dripped from our cars, chemicals from our yards, pet wastes, failing septic systems, and much more. With more than 363,000 people living in Clark County, these things add up. But, while it's true that each of us is part of the problem, it's also true that ...

## *...we all can be part of the solution.*

In fact, you're already making a difference. The clean water fee you pay each year funds new facilities, inspection, maintenance, street sweeping, stream monitoring, code enforcement, and educational and volunteer efforts that protect our streams and satisfy federal requirements. But each of us can do much more. Take a look at the "Things YOU Can Do" listed on the back page and think what we can accomplish together if we all make even a few simple changes.

## *Clean Water Program enters fourth year*

The Clark County Clean Water Program and local citizens are working hard to protect our lakes and streams. The clean water fee, first implemented in 2000, pays for programs to control pollution and protect area streams and lakes. We now have much of the basic structure in place—facilities, ordinances, and programs—and we continue to build on these accomplishments. It takes time for streams and lakes to show improvements, but our positive actions now will result in healthier water in the future.



# Stormwater facilities

## catch and *remove pollutants*

Work continues on two improvement projects that began last year:

- Highway 99 Treatment Facility (near Salmon Creek) – A modified system will carry highway runoff to an underground vault that will catch and remove oil, sediment, and heavy metals.
- West Cougar Creek Infiltration Project – An infiltration system will help reduce runoff and erosion in Cougar Creek.

Two new projects are also scheduled for construction in 2003:

- I-205 Bridge at Salmon Creek Improvements – Bioswales will be built to collect and clean runoff from the bridge and freeway.
- Thomas Wetland – This St. Johns area project will use grading, water controls, and plantings to detain and clean water, as well as improve habitat.

### Inventory is up-to-date and on the map

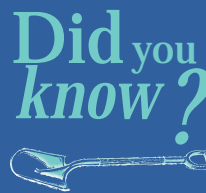
The Clean Water Program has completed an inventory of public storm sewers and facilities. This activity assists county staff with identifying outfalls, ditches, and other drainage facilities, leading to more efficient and regular maintenance. This, in turn, results in water quality improvements, as well as cost savings over time.

The inventory information is expected to be on the county's computerized mapping system this summer. Work continues on completing an inventory of private stormwater systems, rural ditches, and culverts. Databases will continue to be updated as new improvements are built.

### Regular inspection and maintenance improve efficiency

Stormwater systems must be maintained in order to be effective and efficient. The storm drains, pipes, and ditches must stay clear to allow water to flow. Detention ponds, drywells, bioswales, and other facilities must be cleaned to ensure that they can hold and clean stormwater. Streets must be swept to pick up contaminants and debris before they enter the stormwater system or local waterways.

Clean Water Program funding enables regular inspection and maintenance of the system. This has produced an unexpected benefit. With regular inspections to identify where maintenance is needed, we have found that some maintenance can be decreased. For example, in 2002 we decreased the number of drywells cleaned by about 75 percent.



In 2002, Clark County crews collected 3,624 cubic yards of debris that otherwise would have washed into our streams.

## Water Quality Terms

**Bioswale:** a grassy channel that collects stormwater and uses plants to trap and clean pollutants from the water

**Detention Pond:** a landscaped area that first collects stormwater, then releases it slowly into the storm sewer system, reducing stream erosion

**Drywell:** a large vertical pipe that receives stormwater and disperses it into the ground

**Outfall:** the place where a storm sewer pipe or ditch discharges into a stream, river, or lake

**Stormwater:** the rainwater that runs over streets, lawns, driveways, and other surfaces, picking up pollutants along the way

**Watershed:** an area that is bounded by mountains or hills – rainwater in a watershed flows downhill into a common stream, river, or lake



# Education, outreach and *volunteer programs*

For citizens to have an impact on water quality, they first need to know what to do, then they need to take action. That's why educational programs and partnerships for action are such a big part of the Clean Water Program.

*River Rangers, Mother Nature's Garden puppet show, and Earthsavers educate hundreds of students* – River Rangers brought water quality education to more than 400 fourth graders in 2002. More than 4,000 kindergarten through third grade students saw Mother Nature's Garden – a puppet show that teaches children about natural gardening techniques. Earthsavers taught 1,450 students in the fifth, sixth, and seventh grades about water, electricity, conservation, recycling, storm drains, and sources of stormwater pollution. They even learned to calculate how much stormwater runs off their school grounds into storm drains.

**Did you  
know?**

A quart of motor oil can contaminate 250,000 gallons of water.



*Students learn to monitor water quality* – The Clean Water Program, Vancouver Water Resources Education Center, and the Saturday Academy Student Watershed Research Project have come together to mentor teachers and students who want to monitor streams and learn more about local water quality.

*Watershed Stewards help teach others* – Volunteer Watershed Stewards gave more than 1,700 hours of time (an equivalent of \$22,500 in services) in 2002. They shared information with more than 16,000 people, staffed community events, planted trees, restored streamsides, and monitored streams. For information, call the WSU-Clark County Cooperative Extension at (360)397-6060 ext. 7703.

*New program helps owners of small acreage* – Rural landowners face unique water quality issues. In 2003, the Clean Water Program will launch an outreach effort to help small-acreage landowners understand how to manage their land and animals to protect water quality. For information, call the WSU-Clark County Cooperative Extension at (360)397-6060 ext. 7720.

*Technical assistance helps property owners make improvements* – In 2002, Technical Assistance staff inspected 103 private stormwater systems and found that 23 did not have adequate water quality controls. While two of those systems were referred for code enforcement action, staff worked closely with owners of the remaining systems to resolve problems through education and voluntary implementation of better water quality practices.

*Regional Coalition for Clean Rivers and Streams* – The Clean Water Program joined with several other local agencies to pool resources to raise awareness of water quality issues. In 2002, the coalition funded a media campaign called, "What goes on your garden, goes in the river." For more information, visit the Regional Coalition website at [www.cleanriversandstreams.org](http://www.cleanriversandstreams.org).

## **Monitoring programs provide essential information and volunteer support**

Water quality monitoring provides information about the condition of Clark County's streams and serves as a basis for measuring the progress of stream health in the future. In 2002, the Clean Water Program sampled nearly 40 storm sewer and stream sites, monitored stream flow and rainfall, and continued long-term monitoring of Lacamas Lake. We neared completion in developing a central database, documenting the condition of our streams, and drafting a summary report on the health of our lakes and streams. In addition, two new programs that evolved from last year's state-funded monitoring grant are helping to expand the work we do.

*Volunteer Monitoring Program* -- Trained volunteers are working in teams to monitor chemical, biological, and physical habitat conditions at four stream sites. Their work complements the work of staff by helping to identify problems, improvements, and trends.

*Monitoring Resource Center* – Volunteers and local agency staff can receive training on data collection and equipment, check out monitoring equipment, and report their findings at the center. The training is important—if data is collected using standardized methods, it can be added into the Clean Water Program database.

For information on these programs, call Ron Wierenga, (360)397-6118 ext. 4264.





# We can all be part of *the solution*

## Clean water fee expands inspections and enforcement

Enforcement of good clean water practices relies on four key ordinances that regulate stormwater and erosion, wetland protection, habitat preservation, and critical aquifer recharge areas. Since the implementation of the clean water fee, the county was able to hire additional inspectors and increase stormwater and erosion control inspections by 20 percent.

## Clean Water Commission

The Clean Water Commission is a nine-member advisory group to the Board of County Commissioners that provides oversight for the Clean Water Program. In 2002, the Clean Water Commission worked with staff to review the program budget in detail, implement stormwater treatment improvements, bolster water quality monitoring, and enhance public education and outreach.

## Things YOU can do to protect our lakes and streams

### Don't:

- Don't dump anything into storm drains or ditches.
- Don't hose off sidewalks and driveways. Sweep instead.
- Don't let pressure-washed paint, grease, or other pollutants run off your property.
- Don't let your vehicle leak oil or other chemicals.

### Do:

- Use a commercial car wash - or wash your car over grass with phosphorus-free, nontoxic soap.
- Avoid hazardous products and chemicals. Follow directions for use, storage, and disposal if you do use them. Dispose of them properly.
- Recycle motor oil, antifreeze, and household hazardous wastes at collection centers and special events.
- Cover garbage cans and dumpsters. Rain can leach contaminants from trash.
- Compost or recycle yard debris. It can clog storm drains or decay in streams.
- Regularly inspect and pump your septic tank.

"Unless someone like you cares  
a whole lot, nothing is going to  
get better. It's not."

- From Dr. Seuss' "The Lorax"

- Pull weeds by hand instead of using chemicals.
- Use native plants. They're pest-resistant and suited to our climate.
- Use natural groundcover, gravel, or bark instead of asphalt or concrete.
- Disconnect your roof drain to let runoff soak into the ground.
- Pick up pet waste and dispose of it properly.
- Use mulch or ground cover to prevent erosion if you disturb a large area of soil.

### If you live by a stream:

- Plant native plants along stream banks or as a buffer area between your landscaping and the stream.
- Remove invasive plants such as blackberries and English ivy, which can force out or kill native plants and trees.
- Leave logs, boulders, and branches in the stream. They form pools that provide food and habitat for fish and wildlife.
- Fence livestock away from stream banks and cover manure piles.

### For more information:

- Clark County Clean Water Program  
Email: [cleanwater@co.clark.wa.gov](mailto:cleanwater@co.clark.wa.gov); [www.clark.wa.gov](http://www.clark.wa.gov);  
(360)397-6118 ext. 4345
- Clark County Clean Water Commission Annual Report  
(summary or full report) [www.co.clark.wa.us](http://www.co.clark.wa.us);  
(360)397-6118 ext. 4345



proud past, promising future



clean water